

CLAIMS

1. A method for retrieving embolic coils used for treating an aneurysm, comprising the steps of:

providing a wire device that is pushable through a microcatheter and has a flexible distal portion comprising a distal collapsible arm with a latch member carried by the arm;

introducing a microcatheter into the patient's vessel leading to the aneurysm;

introducing the wire device, into the microcatheter whereby the arm collapses while it is within the microcatheter;

pushing the distal end of the wire device through the microcatheter whereby the arm opens when it extends out of the distal end of the microcatheter;

manipulating the latch member so that it engages an embolic coil to be retrieved; and

withdrawing the latch-engaged embolic coil and wire device through the catheter whereby the arm becomes collapsed as the arm is withdrawn through the catheter.

2. A method as defined in claim 1, in which the flexible distal portion comprises distal collapsible arms with a latch member carried by at least one of the arms.

3. A method as defined in claim 1, in which the wire device has a stiffer proximal portion than the distal portion.

4. A method as defined claim 1, in which a portion of the collapsible arm is radiopaque.

5. A method as defined in claim 1, in which the arm and latch are formed from a composition comprising nitinol.

6. A method for retrieving embolic coils used for treating an aneurysm, comprising the steps of:

providing a wire device that is pushable through a microcatheter and has a flexible distal portion comprising a pair of distal collapsible arms with a latch member carried by at least one of the arms, the wire device having a stiffer proximal portion than the distal portion and a portion of the collapsible arm or latch being radiopaque;

introducing a microcatheter into a patient's vessel leading to the aneurysm;

introducing the wire device, into the microcatheter whereby the arms collapse while they are within the microcatheter;

pushing the distal end of the wire device through a microcatheter whereby the arms open when they extend out of the distal end of the catheter;

manipulating the latch member so that it engages an embolic coil

to be retrieved; and

withdrawing the latch-engaged embolic coil and wire device through the catheter whereby the arms become collapsed as the arms are withdrawn through the catheter.

7. A medical device for retrieving embolic coils implanted in a patient, which comprises:

a wire-like device having a flexible distal portion comprising a distal collapsible arm with a latch member carried by the arm; and

said wire device being pushable through a microcatheter and the latch member being operable to engage an embolic coil to be retrieved.

8. A medical device as defined in claim 7, in which said flexible distal portion comprises a pair of distal collapsible arms with a latch member carried by at least one of the arms.

9. A medical device as defined in claim 7, in which the wire device has a stiffer proximal portion than the distal portion.

10. A medical device as defined in claim 7, in which a portion of the collapsible arm is radiopaque.

11. A medical device as defined in claim 7, in which the arm and latch are formed from a composition comprising nitinol.

12. A medical device as defined in claim 7, in which the latch element is formed integrally with the arm and extends at an angle from the arm and toward a

proximal portion of the arm.

13. A medical device as defined in claim 7, in which the wire device is formed from a polymeric material.

14. A medical device for retrieving embolic coils implanted in a patient, which comprises:

a wire device that is pushable through the lumen of a microcatheter;

said wire device having a flexible distal portion comprising distal collapsible arms with a latch member formed integrally with at least one of the arms;

said arms having a flexibility to be collapsible while they are within the lumen of the microcatheter but being in an expanded position when they are outside of the microcatheter;

said wire device having a stiffer proximal portion than the distal portion; and

at least a portion of said distal portion being radiopaque.

15. A medical device as defined in claim 14, in which the arms and latch are formed from a composition comprising nitinol.

16. A medical device as defined in claim 14, in which the wire device is formed from a polymeric material.

17. A medical device as described in claim 14, in which the latch is carried

by one of the arms and has a distal end that is spaced from the other arm when the arms are in the expanded position but when the arms are in a collapsed position, the distal end of the latch engages the opposite arm.

18. A medical device as defined in claim 14, in which the radiopaque material is deposited on the arm by electroplating or ion deposition.